

INSULATE HIVES FOR WINTER USE

Loss of Heat Through Bottom Is Very Rapid, Notwithstanding Belief to Contrary.

DEFECT SHOULD BE REMEDIED

Leaving South Front Unpacked on Theory That Sun Will Furnish Necessary Warmth Erroneous—Sawdust Not Expensive.

(Prepared by the United States Department of Agriculture.)

Contrary to the usual belief of beekeepers, the loss of heat through the bottom of beehives otherwise insulated is very rapid, so that the insulation on the top and sides is never used to its full capacity, as so much of the heat escapes below. On the supposition that "heat rises," it has been the practice for beekeepers not to insulate the bottoms of hives in which bees are wintered. This is a serious neglect which should be remedied in all commercial insulated hives, according to United States Department of Agriculture circular 222, The Insulating Value of Commercial Double-Walled Beehives, by E. F. Phillips, apiculturist.

Insulating Value.

Tests have been made of the insulating value of eight different types of hives. It is clear from the results of these tests that leaving any part of the hive without insulation renders the escape of heat at that point easy. Some beekeepers, in addition to leaving the bottoms of their hives unprotected, also leave the fronts, facing the south, unpacked, on the erroneous theory that the warming of the hive by the sun will overcome the loss of heat at this point.

Space for Insulating.

The insulating value of all ordinary insulating materials depends on the air spaces confined in the material, and the insulating value is increased by increasing the number and decreasing the size of these air spaces. In



Four inches of insulating material in bottom of winter packing case below bottom of hive.

the so-called dead-air spaces in hive construction there are doubtless convection currents within each cavity which tend to dissipate the heat. Since sawdust or other insulating material costs so little, it would seem advisable to increase the thickness of the space for insulation in cold climates to four or even six inches, allowing the beekeeper to fill this space with cheap insulating materials. A comparison of these is given in the circular, together with the results of tests made in the form of a temperature table. The circular is available upon application to the United States Department of Agriculture, Washington, D. C.

TO ESTABLISH HONEY GRADES

Beekeepers From Various Parts of Country Send Samples to Agricultural Department.

Samples of honey are being received by the United States Department of Agriculture from beekeepers in all parts of the country in connection with the work of establishing reliable color grades for extracted honey. A new type of spectrophotometer will be used in this work, which will be done by agriculturists of the department in co-operation with the division of grades and standards of the bureau of agricultural economics. It is also planned to use the honey examined in other investigations. The pollen content of the honeys will be identified by the microchemical laboratory of the bureau of chemistry.

SOW RAPE IN FALL FOR HOGS

By Turning Animals on Crop Month or Six Weeks They May Be Cheaply Finished.

Dwarf Essex rape may be sown in late summer or early fall and the hogs given a fine start toward fattening. By turning pigs on rape a month or six weeks they may be easily and cheaply finished. According to Minnesota authorities, an acre of rape will carry from twenty to thirty pigs for several weeks.

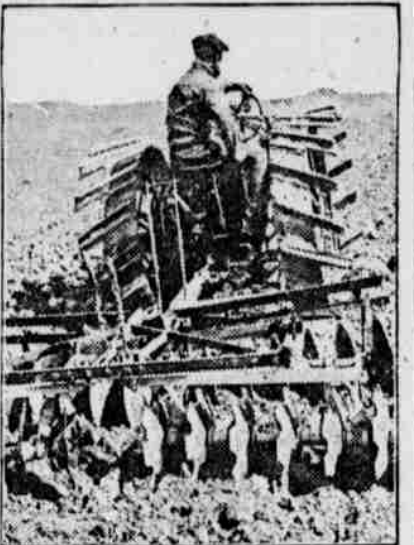
Dwarf Essex rape should be sown on rich land. Five pounds of seed broadcast will sow an acre. The soil should be prepared well and sowing done in late summer or very early fall.

TRACTOR RESPONSIVE TO GOOD TREATMENT

If Not Just Right It Falls Short in Producing Power.

Operator Should Carefully Examine His Machine Every Week or Ten Days and Tighten Up Loose Bolts and Nuts.

The tractor is as responsive to good treatment as an animal or any other machine. In the case of a great many machines the response to good treatment is not so noticeable. This is true because the tractor is a power-furnishing machine, while the average farm machine consumes power, says E. R. Gross of the Colorado experiment station. If the tractor is not just right in every way, it falls short in the production of power. This is sure to be very noticeable, as it is usually pulling a full load and only a



One Man and Tractor Doing the Work of Two Men and Four Horses.

small loss in power cuts down the amount of work done.

In the case of the power-driven machine, any disorder calls for greater power to operate it. The horses or the machine furnishing the power work harder and approximately the same results are accomplished. Hence it is much easier to overlook a slight indisposition on the part of a power-consuming machine than on the part of the power producer.

If any part through which power is transmitted is loose, it may cause a reduction of power. The tractor operator should examine his machine thoroughly every week or ten days to prevent such loss. A bolt in the crank case is loose, oil is lost. The adjustment of a valve stem loosens, the valve is out of proper time and the cylinder does not give full power. The clutch is not adjusted to take hold evenly. Slippage here causes loss of power. Similar leaks may develop in the fuel system and the ignition system. Any of these causes heavy drains on the power. Usually they can be quickly repaired if attended to early. Left too long, they may result in a breakdown involving a larger repair bill and loss of much valuable time.

The throb and rhythm of the tractor should be a part of the operator so that he detects the trouble in its earliest stage.

SELF-FEEDER FOR CHICKENS

Home-Made Contrivance Reported to Department of Agriculture From Indiana Agent.

A good home-made self-feeder for poultry reported to the United States Department of Agriculture by the county extension agent of Knox county, Indiana, is one made of an old mower wheel, a barrel with both ends knocked out, an old wash tub, and a small platform of rough boards. The wheel is first laid on the platform. The barrel is then placed on the wheel, filled with dry mash, and the tub turned over the top of it for a cover. A barrel should be used which leaves just enough space between its edge and the rim of the mower wheel to allow room to feed. This prevents the feed from being scratched outside the rim.

SILLO IS HANDY IN EMERGENCY

In Seasons of Drought Farmer Has Supply of Feed for Stock Stored in Years of Plenty.

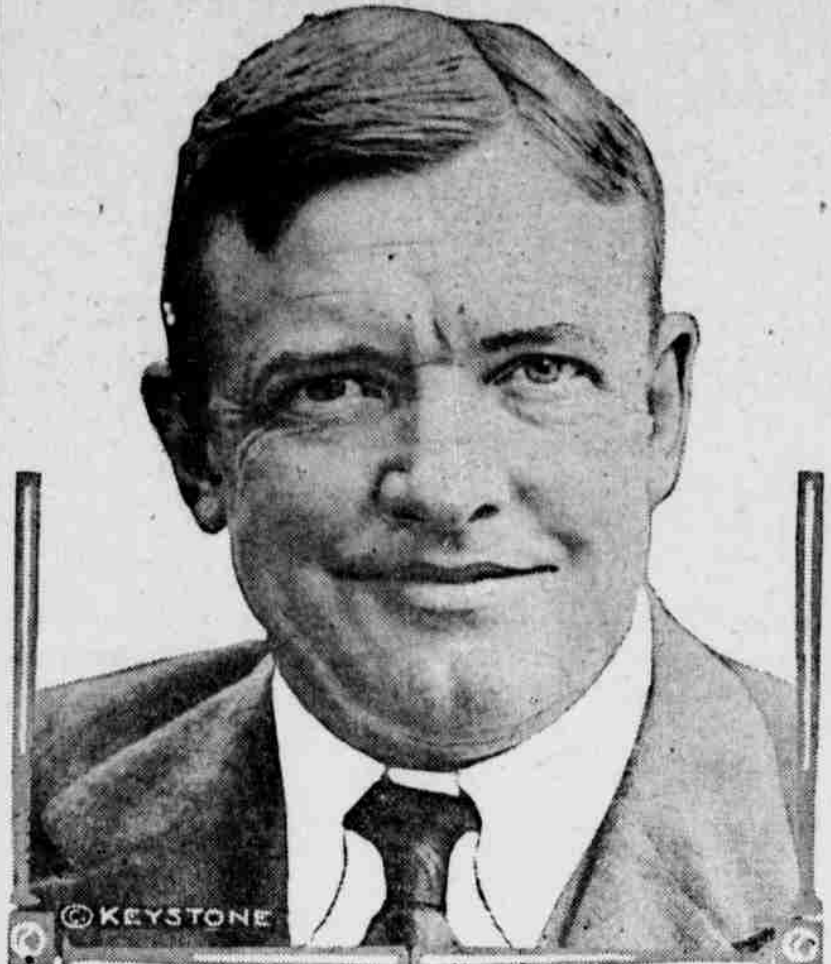
In seasons of drought, when the pastures are "burnt up" and the crops partially or totally ruined, the farmer having live stock must dispose of a large part of his herd—usually at a sacrifice, or buy high-priced feed. Here the farmer with the silo is ahead of the man who has none. He can keep his stock in good shape by giving them the silage he has stored from years of plenty. Corn properly ensiled will keep for many years.

HAVE COLLAR FIT PROPERLY

One That Sets Perfectly in Spring May Be Too Large by Fall—Pads Are Necessary.

A properly fitted collar is one that lies snugly along the sides of the neck with room enough at the bottom to allow a hand to be passed through. Sweat pads are necessary to adjust the collar to different horses and are also made necessary by the loss of flesh; a collar that fits perfectly in the spring may be too large by fall.

CHRISTY MATHEWSON SAID TO BE SLATED AS CHIEF OF NEW UNION



Organization of another brotherhood of "union" has been started among the major league baseball players. It has been learned in some quarters.

Quiet movements have been made among the players all season, but the organization has not been completed and its complete plans will not be announced until near the end of the season, or until winter.

Efforts have been made, or will be made, to get Christy Mathewson, former Giant star pitcher, who now is recovering from tuberculosis at Saranac lake, to act as the president of the organization, either in an active or honorary capacity.

Desire Member on Board.

The organization will attempt to get a representative of the players on the national advisory board, which consists of Commissioner Landis, John A. Heydler, president of the National league, and Ban Johnson, president of the American league.

The players take the position that they are entitled to have a voice in the sessions when rules and regula-

tions which affect their end of the game are considered.

At various times since the old players' fraternity ceased to function, the players have been considering the formation of another organization. The demand for such a protective body was felt to have been acute last winter when "Babe" Ruth, Bob Meusel and Bill Piercy were suspended for violating the anti-barnstorm rule.

Think Rule Is Unjust.

The rule was unjust to them and that practically all of the rules along the same line were drawn from the club owners' viewpoint alone.

Efforts also will be made, it is understood, to have a different form of contract adopted in the major leagues. The players maintain that under the present system they haven't a chance to have a voice in their own affairs and have no appeal from a form of virtual "slavery" that the present form of contract places them in.

The players also would like to have some kind of an arbitration board for the review of salary disputes.

EXPENDITURES INCREASE

Perhaps in no other sport is there as much expense as in the running of a ball team, and the cost has increased greatly since the early days of the game. There is an authentic record of receipts and expenditures of the Boston club for the year 1875. The total receipts for the season were \$37,767.06 and the expenses were \$34,595.99, which left a balance of \$3,261.07. A profitable season in those times. Now, figure McGraw's team as an example. Two players cost him \$175,000 without figuring anything else. Babe Ruth's salary alone is probably twice the amount of the total receipts of the Boston team back in 1875, and there were good ball players in those days, too.

HOW BATTING KING OF NATIONAL LEAGUE HITS



The photograph shows a closeup of Roger Hornsby's hands, showing how he grasps his bat. Hornsby, star second baseman of the St. Louis Cardinals, led the National league in batting last year with an average of .370. He is out to repeat this season and to better his last year's mark.

HELPS WIN BASEBALL GAMES

Nothing More Conducive to Success of Local Team Than Hearty Support of Fans.

After all, one of the things which helps a team win is the support of the home folk. It's so in all kinds of sports, particularly baseball. With the fans full of pep, cheering the athletes on, it is easier to respond. With the fans giving the razz, it is easier for the players to drop into a slump. Many baseball games have been won by the fans as well as the players.

Baseball Notes

It is obvious that many pitchers never have woven any tangled web.

Amos Strunk's work in center field is highly pleasing to the Chicago fans.

If those reports are true Shufflin' Phil Douglas has shuffled himself into the discard.

The Portland baseball club has purchased Pitchers Sullivan and Yarrison from the Philadelphia Athletics.

The Giants have a new pitcher named Blume. Will Blume blossom or be just a morning glory?

Every now and then the Braves up and win a game, just to show that baseball is impossible to dope.

Foster Ganzel, former Boston player, now with Evanston, will probably be signed by the Cleveland Indians.

While with Cincinnati, Slim Sallee pitched 65 balls in a nine inning game against Brooklyn, September 21, 1919.

The St. Louis Nationals announce the purchase of Ray Blades, second baseman, from Houston, of the Texas league.

During an American league game against Milwaukee, May 7, 1901, each of the nine Detroit players scored one run.

If the baseball players organize a union, the first thing they may be expected to do is to declare the umpires to be unfair.

The Cleveland American league club has purchased Pitcher Winn from the Nashville (Tenn.) Southern association team.

Roy Thomas, formerly of the St. Louis National league team, succeeded George Whiteman as manager of the Houston club.

George Abrams, star pitcher of the Enid (Okla.) club of the Western association, has been bought by the Cincinnati Nationals.

Wallace Hood is developing into a first baseman of class with the Seattle club, and he is hitting as if the position agreed with him.

Organized baseball had its first real scandal in 1877, when four players of the National league were expelled for "selling games."

Mandy Brooks, outfielder of the Peoria baseball club of the Three-I league, was sold to the Columbus club of the American association.

LOW PRICES FOR STARS

Extravagance is not a fault of the Cardinal management. It lets the New York and other aggregations pay the price.

The club paid in 1915 just \$500 for Rogers Hornsby. It has been offered approximately a quarter of a million for him since.

It paid \$300 for Bill Doak. If McGraw gave \$100,000 for McQuillan, what would he pay for Doak?

The Cards paid nothing for Almsmith or Del Gainer. Four-niner cost but a couple of thousand dollars.

Discarded players brought McHenry, Smith, Mueller, Haines, Pertica, Sherdell and Flack to the club. The treasury didn't suffer one kopek.

This should prove that money cannot always obtain the best results in baseball.

SHORTSTOP BANCROFT NEAR BONEHEAD PLAY

Brilliant Giant Player Fields Same Ball He Hit.

Fast Runner on Third and Fielder With Poor Throwing Arm Save New Yorker From High Rating in the List of "Bones."

Dave Bancroft, brilliant shortstop of the Giants, is rated as a smart player. Hughey Jennings, now acting as assistant to John McGraw in directing the Giants, says that Bancroft is the brains of the New York club.

Only recently in a game in the National league, Bancroft pulled a play that might have given him high rating in the list of "bones," had not the umpire come to his rescue.

With a runner on third base, Bancroft lifted a fly ball to the outfield. It was a hard-hit ball and the fielder was compelled to go deep to make the play.

It so happened that the runner on third was a very fast man, also that the fielder making the catch had a



Dave Bancroft.

rather poor throwing arm. These two things tended to save the day for Bancroft.

The runner on third held his base until the fly ball was caught. The moment it struck the hands of the fielder he dashed for the plate.

The fielder with the weak arm realizing that he was too deep to have any chance of cutting the runner down at the plate, returned the ball leisurely to the infield.

Bancroft, playing proper baseball, had run out his hit to the limit and was between first and second when the relay came back into the infield. Bunny couldn't resist the temptation to field the ball and toss it to some other player of the team in the field.

The team in the field contended that in fielding the ball, Bancroft had killed a chance for a play at the plate, and for such interference the runner who had scored should be declared out.

The umpire at the plate, however, ruled that the run had crossed the plate before Bancroft even touched the ball, and that the act of the New York shortstop in no way prevented a play, since there was no play possible. It was a close call for the brainy Bancroft.

INTERESTING SPORT NOTES

West Virginia university has dropped wrestling.

America has this year beaten England at polo, golf and rowing.

W. B. Snow, '18, has been appointed head coach of the Harvard freshman football squad for next fall.

Another thing to enthuse about on a hot day is the report that Roger Conit busted a billiard record.

Brooklyn boasts 380 tennis courts in six public parks. City tournaments are an annual feature for boys and girls, men and women.

Leslie Mann, star outfielder of the St. Louis National League baseball club, will begin his duties as a member of the coaching staff of Indiana university about October 1.



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"Take it away."
"Huh?"
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